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| APPLICATION NO.  | FILING DATE    | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|--|----------------|----------------------|-------------------------|------------------|
| 09/391,781   | 09/08/1999     | GEORGE W. PALMER     | 99CR107/KE 9067         |                  |
| 7.   | 590 06/15/2004 |                      | EXAMI                   | NER              |
| ROCKWELL COLLINS INC ATTENTION KYLE EPPELE 400 COLLINS ROAD NE |                |                      | HAILU, TADESSE          |                  |
|  |                |                      | ART UNIT                | PAPER NUMBER     |
| CEDAR RAPIDS, IA 52498   |                |                      | 2173                    |                  |
|  |                |                      | DATE MAILED: 06/15/2004 |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

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|  |   | Application No.   | Applicant(s)   |  |  |  |  |
|--|---|---|--|--|--|--|--|
| Office Action Summary  |   | 09/391,781  | PALMER ET AL.  |  |  |  |  |
|  |   | Examiner  | Art Unit   |  |  |  |  |
|  |   | Tadesse Hailu   | 2173   |  |  |  |  |
| The MAILING Period for Reply   | DATE of this communication ap   | pears on the cover sheet with the d   | correspondence address   |  |  |  |  |
| THE MAILING DAT  - Extensions of time may be after SIX (6) MONTHS from the period for reply specified in the period for reply specified in the period for reply within the Any reply received by the                                   | E OF THIS COMMUNICATION.  Be available under the provisions of 37 CFR 1.  In the mailing date of this communication.  Cified above is less than thirty (30) days, a repecified above, the maximum statutory period set or extended period for reply will, by statut | LY IS SET TO EXPIRE 3 MONTH( 136(a). In no event, however, may a reply be tire by within the statutory minimum of thirty (30) day I will apply and will expire SIX (6) MONTHS from the, cause the application to become ABANDONE and date of this communication, even if timely filed | nely filed  rs will be considered timely.  the mailing date of this communication.  D (35 U.S.C. § 133). |  |  |  |  |
| Status   |   |   |  |  |  |  |  |
| 1) Responsive to   | communication(s) filed on 01 A  | <u> April 2004</u> .  |  |  |  |  |  |
| 2a)⊠ This action is  | ☐ This action is <b>FINAL</b> . 2b)☐ This action is non-final.  |   |  |  |  |  |  |
| •  | ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is   |   |  |  |  |  |  |
| closed in acco   | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.   |   |  |  |  |  |  |
| Disposition of Claims  |   |   |  |  |  |  |  |
| 4)⊠ Claim(s) <u>1-4,6</u>  | Claim(s) <u>1-4,6-12,14,17,18,21 and 22</u> is/are pending in the application.  |   |  |  |  |  |  |
| 4a) Of the abo   | 4a) Of the above claim(s) is/are withdrawn from consideration.  |   |  |  |  |  |  |
| · <u> </u>   | Claim(s) is/are allowed.  |   |  |  |  |  |  |
|  | Claim(s) <u>1-4,6-12,14,17,18,21 and 22</u> is/are rejected.  |   |  |  |  |  |  |
|  | Claim(s) is/are objected to.  |   |  |  |  |  |  |
| 8)[ Claim(s)   | 8) Claim(s) are subject to restriction and/or election requirement.   |   |  |  |  |  |  |
| Application Papers   |   |   |  |  |  |  |  |
| 9) ☐ The specificati   | on is objected to by the Examin   | er.   |  |  |  |  |  |
| 10) The drawing (s   | I0)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.   |   |  |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |   |   |  |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. |   |   |  |  |  |  |  |
| 11) I he oath or de  | claration is objected to by the E   | examiner. Note the attached Office  | Action or form PTO-152.  |  |  |  |  |
| Priority under 35 U.S.   | C. § 119  |   |  |  |  |  |  |
| a) All b) S<br>1. Certified<br>2. Certified  | ome * c) None of: d copies of the priority documen d copies of the priority documen   | n priority under 35 U.S.C. § 119(a<br>hts have been received.<br>hts have been received in Applicationity documents have been received.   | on No  |  |  |  |  |
| •  | tion from the International Burea   | •   |  |  |  |  |  |
| • •  |   | t of the certified copies not receive   | ed.  |  |  |  |  |
|  |   |   |  |  |  |  |  |
| Attachment(s)  1) Notice of References 0   | ited (DTO, 802)   | 4) Interview Summary  | (PTO-412)  |  |  |  |  |
|  | s Patent Drawing Review (PTO-948)   | Paper No(s)/Mail D  | ate  |  |  |  |  |
| 3) Information Disclosure Paper No(s)/Mail Date  | Statement(s) (PTO-1449 or PTO/SB/08   | 5) Notice of Informal F<br>6) Other:  | Patent Application (PTO-152)   |  |  |  |  |

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#### **DETAILED ACTION**

- 1. This Office Action is in response to the AMENDMENT entered on April 1, 2004 for the patent application number 09/391,781.
- 2. The pending claims 1-4, 6-12, 14, 17, 18, 21 and 22 are examined as follows.

Claim Rejections - 35 U.S. C. § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. <u>Claims 1-4, 6-12, 14, 17, 18, 21 and 22 rejected under 35 U.S.C. 103(al as being unpatentable over Briffe et al (6,112,141) in view of Brunts et al (US 5,964 821).</u>

Briffe et al ("Briffe") relates generally to aircraft flight information and control system that permit simplified flight planning a-rid navigation procedures, reduced cost, reduced pilot workload, and improved safety. Moreover, Briffe relates to an improved graphical oriented aircraft display and control interface. Briffe reads over the present claimed invention as follows:

#### With regard to claim 1:

Briffe discloses an avionics system (Fig. 2). The system includes an avionics radio receiver (Fig. 2, #71); the system also includes a plurality of displays (16, 18, 20, and 22) coupled to said avionics receiver (71) (see Fig. 2); the system further includes an pedestal (14) (or operational system), coupled to said displays (Fig. 1, #I4); the

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displays further includes a GUI (see Figs. 3, 5, 7, 9, etc) and a displayed cursor (21) to manipulate the displayed items (see Figs. 21, 22, 23, etc).

However, Briffe does not disclose <u>a graphical user interface returns to a pre-existing display, without user input, upon a passage of time</u>. Brunts discloses a navigation system for offering navigational assistance to a mobile device user. The system of Brunts also describes the above claimed limitation, that is, automatic time out (without the user input) feature which returns to the previous display (column 17, lines 48-column 18, lines 3).

Briffe and Brunts are analogous art because they are from same field of endeavor, that is, navigational system display. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to use an automatic time out feature in place of manual input in order to return to the previous display. Thus, having the automatic time out feature in navigation system function will help the pilot not to be occupied manually inputting or manually interacting with the display. Furthermore, it is well settled that it is not "invention" to broadly provide a mechanical or automatic means to replace manual activity that has accomplished the same result. In re Rundell. 18 CCPA 1290, 48 F.2d 958, 9 L~SPQ 220.

Therefore, it would have been obvious to combine Brunts with Briffe to obtain the invention as specified in claim 1.

With regard to claim 2:

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Briffe in view of Brunts discloses pedestal (14) that includes a plurality of pilot controls, such as switch (38), keyboard (34), trackballs (44), etc. are used to manipulate data in a navigational system (Briffe, col 5, lines 21-61).

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# With regard to claim 3:

Briffe in view of Brunts discloses a plurality of multi-function displays (Briffe, Fig. 1, #18, and #20).

## With regard to claim 4:

Briffe in view of Brunts discloses a communication radio receiver (Briffe, col 7, lines 4146).

# With regard to claims 6 and 11:

Briffe in view of Brunts discloses a GUI wherein the GUI includes a simultaneous window display, such as a simultaneous COM 1 and COM 2 radio frequency display (Briffe, Fig. 17-20, col 20, lines 34-48).

#### With regard to claims 7 and 12:

Briffe in view of Brunts discloses manually controlled (pedestal 14) interface. The GUI shown in Fig. 17-20 includes interactive controls manually controlled push-button (504), rotary knob (506) swapping button (508). Activation of these controls invokes a predetermined screen display, such as activating button 504 of Fig. 17 results Fig. 18. ("a predetermined relationship") (Briffe, col 23, lines 29-61, col 39, lines 52-63, col 45, lines 41-45).

#### With regard to claim 8:

Briffe in view of Brunts discloses a unit of display located above each MFD 18, 20, and includes a screen (502), may be a touch-sensitive screen, interacting with the screen displays screen (502) in a pop-up or expanded view of a page or device managed (Briffe, Fig. 17, col 23, lines 29-67).

# With regard to claim 9:

As indicated in the rejection to claim 1, Briffe discloses an avionics system (Fig. 2). The system includes an avionics radio receiver (Fig. 2, #71); the system also includes a plurality of displays (16, 18, 20, and 22) coupled to said avionics receiver (71) (see Fig. 2); the displays further includes a GUI (see Figs. 3, 5, 7, 9, etc), etc) and a displayed cursor (21) to manipulate the displayed items (Briffe, Figs. 21, 22, 23, etc); Briffe's GUI provides an expanded view of a page or device managed (Briffe, Fig. 17, col 23, lines 29-67).

However, Briffe does not disclose a graphical user interface returns to a pre-existing display, without user input, upon a passage of time. Brunts discloses a navigation system for offering navigational assistance to a mobile device user. The system of Brunts also describes the above claimed limitation, that is, automatic time out (without the user input) feature which returns to the previous display (Brunts, column 17, lines 48-column 18, lines 3).

Briffe and Brunts are analogous art because they are from same field of endeavor, that is, navigational system display. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to use an automatic time out feature in place of manual input in order to return to the previous

display. Thus, having the automatic time out feature in navigation system function will help the pilot not to be occupied manually inputting interacting with the display.

Furthermore, it is well settled that it is not "invention" to broadly provide a mechanical or automatic means to replace manual activity that has accomplished the sane result. In re Rundell. 18 CCPA 1290, 48 F.2d 958, 9 IJSPQ 220.

Therefore, it would have been obvious to combine Brunts with Briffe to obtain the invention as specified in claim 9.

## With regard to claim 10:

Briffe in view of Brunts discloses a GUI returning to a pre-existing display upon a passage of time (Brunts, column 17, lines 48-column 18, lines 3).

# With regard to claim 14:

As indicated in the rejection to claim 1, Briffe discloses an avionics system (Fig. 2). The system includes an avionics radio receiver (Fig. 2, #71); the system also includes a plurality of displays (16, 18, 20, and 22) coupled to said avionics receiver (71) (see Fig. 2); the displays further includes a displayed cursor (21) and a GUI for graphically manipulating a plurality of managed devices, such as a radio signals (Briffe, Figs. 3, 5, 7, 9, 21, 22, 23, etc). The system of Briffe discloses a GUI wherein the GUI includes a simultaneous window display, such as a simultaneous COM 1 and COM 2 radio frequency display under screen (502) (Briffe, col 20, lines 34-48).

However, Briffe does not disclose a graphically coupling returning to a pre-existing display, without user input, upon a passage of time. Brunts discloses a navigation system for offering navigational assistance to a mobile device user. The

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system of Brunts also describes the above claimed limitation, that is, automatic time out (without the user input) feature which returns to the previous display (Brunts, column 17, lines 48-column 18, lines 3).

Briffe and Brunts are analogous art because they are from same field of endeavor, that is, navigational system display. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to use an automatic time out feature in place of manual input in order to return to the previous display. Thus, having the automatic time out feature in navigation system function will help the pilot not to be occupied manually inputting or interacting with the display. Furthermore, it is well settled that it is not "invention" to broadly provide a mechanical or automatic means to replace manual activity that has accomplished the same result. In re Rundef. 18 CCPA 1290, 48 F.2d 958, 9 USPQ 220.

Therefore, it would have been obvious to combine Brunts with Briffe to obtain the invention as specified in claim 14.

#### With regard to claim 17:

Briffe in view of Brunts discloses pedestal (14) (or operational system), coupled to said displays (16, 18, 20, and 22) for manipulating managed devices or pages (Briffe, col 5, lines 2161).

#### With regard to claim 18:

Briffe in view of Brunts discloses a unit of display located above each MFD 18, 20, and includes a screen (502), may be a touch-sensitive screen, interacting with the

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screen displays screen (502) in a pop-up or expanded view of a page or device managed (Briffe, Fig. 17, col 23, lines 29-67).

## With regard to claim 21:

Briffe discloses an avionics radio receiver and a display coupled to said avionics receiver (fig. 2). Briffe also discloses manually controlled (pedestal 14) interface. The GUI shown in Fig. 17-20 includes interactive controls manually controlled push-button (504), rotary knob (506) swapping button (508). Activation these controls invoke a predetermined screen display, such as activating button 504 of Fig. 17 results Fig. 18. ("a. predetermined relationship") (Briffe, cot 23, lines 29-61, cot 39, lines 52-63, cot 45, lines 41-45). The display further includes a GUI (see Figs. 3, 5, 7, 9, etc) and a displayed cursor (21) to manipulate the displayed items (see Figs. 21, 22, 23, etc). However, Briffe does not disclose: a graphically coupling returning to a pre-existing display, without user input, upon a passage of time. Brunts discloses a navigation system for offering navigational assistance to a mobile device user. The system of Brunts also describes the above claimed limitation, that is, automatic time out (without the user input) feature which returns to the previous display (Brunts, column 17, lines 48-column 18, lines 3).

Briffe and Brunts are analogous art because they are from same field of endeavor, that is, navigational system display. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to use an automatic time out feature in place of manual input in order to return to the previous

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display. Thus, having the automatic time out feature in navigation system function will help the pilot not to be occupied manually inputting or interacting with the display. Furthermore, it is well settled that it is not "invention" to broadly provide a mechanical or automatic means to replace manual activity that has accomplished the same result. In re Rundell. 18 CCPA 1290, 48 F.2d 958, 9 1JSPQ 220.

Therefore, it would have been obvious to combine Brunts with Briffe to obtain the invention as specified in claim 14.

# With regard to claim 22:

Briffe in view of Brunts discloses a unit of display located above each MFD 18, 20, and includes a screen (502), may be a touch-sensitive screen, interacting with the screen displays screen (502) in a pop-up or expanded view of a page or device managed (Briffe, Fig. 17, col 23, lines 29-67).

#### Response to Arguments

4. Applicant's arguments filed April 1, 2004 have been fully considered but they are not persuasive. Applicant argues that applying Brunts solution (i.e., automatic feature) with Briffe teaches away from applicants recital of a return "to a pre-existing display, without user input, upon a passage of time," as recited in applicants claim 1. In contrast with the applicants argument, applying automatic operation feature in place of manual operation may accomplishes the same result (see the recited case law). Automatic operation feature enhances the manual operation; automatic operation feature also benefits the operator (pilot). Thus, applying Brunts with Briffe does not teach away from the current invention, it rather teaches the current invention.

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Thus, Briffe in view of Brunts further discloses the required claimed element, that is, a passage of time is required prior to returning to a pre-existing display. Briffe in view of Brunts discloses a time out period of five seconds for example may expire before returning to the navigation display mode (see Brunts, column 18, lines 62-column 18, lines 4),

With respect to claims 7 and 8, Applicant also argues that the Briffe does not disclose that a predetermined manual manipulation of the radio control causes a cursor to move to a predetermined position of said display. In contrast to the applicant argument, Briffe in view of discloses the claimed subject matter of claims 7 and 8, selecting a function via cursor will activate, open (or expand) the function (Briffe, column 3, lines 7-30, and 31-50, and elsewhere).

Since the remaining arguments are similar to the above arguments. Thus, similar response is applied respectively. In conclusion, having fully addressed the Applicant's arguments, the rejection still stands.

## Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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- 6. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Tadesse Hailu, whose telephone number is (703) 306-2799. The Examiner can normally be reached on M-F from 10:00 6:30 ET. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, John Cabeca, can be reached at (703) 308-3116 Art Unit 2173 CPK 2-4A51.
- Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Tadesse Hailu June 7, 2004

> BAHUYNA IMARY/EXAMINER